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Facing Catastrophe -- Risk and Response: The 9/11 and 11-M Commissions' Blind Sides. Scott Atran.

Abstract:

Background thinking for the Madrid terrorism summit has stemmed partly from the 9/11 Commission and Spain's Comisión 11-M. Their presentations fall short on pinpointing the sources of attacks that carry the most risk and how best to respond. Terrorist attacks over the last decades follow a power-law distribution, which anticipates future terrorist events with ever broader effects. Intelligence estimates based on models keyed to frequency and recency of past occurrences make us less secure even if they predict most terrorist events. Evolution, complex adaptive systems, and WWII experience from British intelligence provide salutary lessons for thinking "outside the box" with decentralized expertise. History shows that people do not readily panic in surprise attacks and that local actors may be best able to organize response efforts. Proposals to centralize intelligence and unify command and control are not promising given recent transformations in terrorist networks in the wake of Al-Qaeda's operational demise.

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Last year's hearings of the 9/11 Commission in the USA and the Comisión 11-M in Spain were chartered to examine preparedness for the worst terrorist attacks in the history of their countries and to provide recommendations designed to guard against future attacks. Hindsight criticisms of preparedness from all sides of the political divide suffer from the illusion that the gathering storm was foreseeable, as in a video run backwards. What is more serious is that, although the historical reporting by the commissions is often admirable, the recommendations[1] and testimony[2] elicited so far fall short on pinpointing the sources of attacks that carry the most risk and how best to respond.

Large and rare events are responsible for most of the cataclysmic and cascading consequences that shape history (climatic and biological disasters, major financial and health crises, political and cultural revolutions, increasingly destructive wars and terrorism). People do not repeat history's catastrophes because they forget them; people build up self-destructing ideologies and behavior patterns that continue history's catastrophic path because they remember the past too well. The coaches and players of successful sports teams seem to intuitively understand the point. Once a rival team runs a trick play, shame on you if they do it to you again. So, teams prepare for trick plays. But how does a team prepare for a new trick play? What local information can lead to a global (or team) response that something strange is afoot? Certainly not just by re-reading the play book.[3] True, the past is all we have as a guide to the future, but fixing on what is most frequent and near in time can miss the blindside.[4]

The failure of Israeli Military Intelligence in the October 1973 "Yom-Kippur" War is a good example of what General Isaac Ben Israel, one of Israel's top military strategists, calls "the

fallacy of induction.”[5] Preparations for a surprise attack by Egypt and Syria took place under cover of a series of military exercises called “Tahrir 41.” After careful scrutiny of the previous 40 exercises, Israeli Intelligence learned the Tahrir pattern all too well. “When the 41st began, we immediately recognized the pattern and assessed it to be another exercise in the series,” says Ben Israel, “only this time the Egyptians deviated from the pattern and crossed the canal.”

Another example Ben Israel cites is the supposed menace from Iraqi WMDs, though here the bias in judgment is more a “fallacy of immediate relevance,” that is, concentrating on what is most obvious and direct and not on what may be indirect but potentially most telling. All intelligence reports noted past attempts by Iraq to build and hide such weapons, but no one really bothered to ask if Iraq had the operational capability to still use them, and if there is no such capacity, then either there are no weapons or they are useless: “Surely you don’t expect to dig the hidden missiles out of the sand, 12 years after they had been buried there, and launch them without all sorts of training and equipment. There was not even one intelligence report on these subjects.” As in science, only bold conjectures, deductions and refutations can reliably reduce uncertainty.

Intelligence estimates continue to be based primarily on models keyed to frequency and recency of past occurrences, making us less secure even if they predict most terrorist events. The more we look to the ripples, the less we are prepared for a tsunami. The more we fix on box-cutters and airport security, the more vulnerable we may become. A recent paper in *Physics and Society* charts terrorist attacks worldwide between 1968 and 2004, as compiled in the National Memorial Institute for the Prevention of Terrorism (MIPT) database.[6] It finds that very few terrorist attacks account for a very large percentage of casualties. Mathematicians call this trend a “power law distribution.” This trend anticipates future terrorist events with ever broader political, economic and social effects, and points toward ever more massive attack.

Jihadists who live more and more in a virtual global community with little institutional control – and who plan attacks with less and less concern for retaliation on their own home territories and populations – appear to obey a devotional logic immune to material compromise, classical risk management or conventional games of deterrence. When I interview would-be suicide bombers – members of the radical fraternity of “Born Again” Islam – I ask questions of the sort: “So what if your family were to be killed in retaliation for your action?” or “What if your father were dying and your mother found out your plans for a martyrdom attack and asked you to delay until the family could get back on its feet?” To a person they answer along the lines that there is duty to family and duty to God but duty to God cannot be postponed.[7]

Current risk management approaches to countering terrorism often assume adversaries model the world on the basis of rational choices that are commensurable across cultures. But for the would-be martyrs I have interviewed it often doesn’t matter that others will reap the rewards of his sacrifice. Neither does it seem to matter for those who issue religious edicts (fatwahas) condoning Jihadist martyrdom if the martyr (shaheed) kills thousands of foes or no one but himself – he will attain Paradise just the same. Such findings suggest that devotional values are not very sensitive to standard calculations of cost and benefit, to quantity or to tradeoffs across different moral and cultural frameworks. This means that traditional calculations of how to defeat or deter an enemy (for example by eliminating most key operatives or threatening destruction of supporting populations) may not succeed.[8]

One of the most important post 9/11 developments in Global Network Jihad is that surviving

Al Qaeda offshoots and newly emerging Jihadist groups and cells no longer consider themselves to be territorially rooted in supporting populations. Unconstrained by concrete concerns for what will happen to any population that supports them, they can allow themselves to seriously imagine fulfillment of their apocalyptic vision.[9] "God has ordered us to build nuclear weapons," proclaimed Fazlur Rahman Khalil of Pakistan's Harkat ul-Mujahedeen on CBS television's 60 Minutes II. A subsequent suicide attack on India's Parliament in December 2001 by Jaish-e-Muhammed, a Pakistani splinter group of the al-Qaeda affiliate that Khalil heads, perhaps brought nuclear war closer than at any time since the Cuban Missile Crisis.[10] Imagine what these people could do with the non-conventional weapons they actively seek. A fatwah released in September 2003 in Al-Qaeda's name declares that "nuclear warfare is the solution for destroying America." In April 2004, Hafez Sayeed, leader of the disbanded Pakistani Jihadist group Lashkar-e-Taiba, said that "mass killing of non-believers is the only solution to international conflicts in the Muslims' favor."

Physicist Richard Garwin, a former U.S. presidential adviser and recipient of the National Medal of Science, sees suicide terrorists more likely to explode a small nuclear device at ground level, rather than in the air by missile or plane, because it is easier to deliver. "If such a device were delivered by truck or train and detonated in a densely populated area," Garwin told me, "more people would be killed by radiation than in the Hiroshima air burst." (Harvard physicist Richard Wilson chimed in that the Hiroshima and Nagasaki bombs were deliberately exploded at 500 feet to avoid radiation, so that 99% of the 300,000 or so casualties came directly from the bomb blasts). Garwin is concerned that not enough is being done to prevent theft of Highly Enriched Uranium (HEU). He notes that U.S. and Soviet Union made an agreement some years back that the United States would provide 20 billion dollars to take 500 tons of HEU - enough for some 8 to 20 thousand nuclear bombs—and reduce them from about 94% weapons uranium to about 4% nuclear grade that can be used in nuclear reactors. This process is now a little more than half way through. But there are still hundreds of additional tons of uranium in the former Soviet Union that have not been reprocessed. The additional cost of early reprocessing that, not down to 4% but just down to 19%, would be in the tens of millions rather than billions of dollars.

General Anatoly Kulikov, Vice-Chairman of the Russian Duma's Security Committee, downplays the risk of waiting. At a NATO workshop on suicide terrorism that I co-chaired with Ariel Merari last summer,[11] Kulikov declared: "we are absolutely certain that current safeguards make theft of HEU practically impossible in our country." Outside experts are not so sure.

Pakistani physicist Pervez Hoodbhoy, who presently devotes much of his life to easing tensions between Pakistan and India,[12] and who was one of the first to publicly warn against the rogue nuclear operations of fellow countryman Abdul Qader Khan, does not fear so much that terrorists could manufacture a plutonium device like North Korea now says it has (which can only be used in an implosion mode that is hard for non-state actors to engineer because it requires highly sophisticated technology to achieve exact spherical symmetry and extremely precise timing) or even steal a HEU device (because of sophisticated locks that render the weapon useless if tampered with). But he is concerned that HEU can be mined from existing stockpiles in the former Soviet Union for use in a gun-type weapon. It would probably have to be built on location from smuggled parts because fabrication would require a bit of room, at least an apartment. The worry is that well-educated and motivated Jihadist sympathizers - like the anarchist student bomb-makers a century ago [13] - know as much about what is needed as those trying to stop them. "Any graduate student of mine who couldn't design a workable nuclear bomb," Hoodbhoy said without boast, "doesn't deserve a Ph.D." (The basic principles for an A-bomb design, though not for an H-bomb, can be had from the declassified Serber lectures).

How do we make sure that we stop those who yearn for apocalyptic terror? We can't be certain to ever completely prevent an attack or eliminate its effects, but we can greatly reduce the risk of attack and, if attacked, strongly contain the damage and suffering. Yet current proposals out of the 9/11 and 11-M commissions to centralize intelligence and unify response command and control are not promising on either count. Evolutionary science teaches us that many small and energetic creatures can usually overwhelm and out compete larger and more ponderous ones.[14] The Santa Fe Institute's Scott Page suggests that the theory of complex adaptive systems conveys a parallel lesson: if you want to solve a novel problem in an applied field – say, a mathematical puzzle in economics – you're more likely to succeed by consulting a random selection of problem solvers than a narrow selection of the discipline's top experts.[15]

R.V. Jones, the father of "scientific intelligence," implicitly knew all of this.[16] With the Battle of Britain in full swing and his country's back to the wall, this junior staffer networked a hodgepodge of thinkers to deal with national survival, from actor Leslie Howard (of *Gone with the Wind* fame) to the Bletchley cryptographers, such as the unconventional mathematical wizard and sometimes biological theorist, Alan Turing, who founded computer science. They blocked the Luftwaffe to prevent the invasion of Britain (by bending guidance beacons so that bombs fell off target), and capped the missile menace that represented the Nazis' last hope of survival (by focusing decryption efforts not on immediate operations but on V-1 and V-2 trails in Poland). They didn't simply think outside the box, by adding new dimensions. They also became expert at tinkering with the same box, re-conceptualizing it using different variables or a different coordinate system. They combined old rules to form new, creating a huge lego kit and by so doing were able to "deconstruct" apparently complicated messages into relatively simply code.

Another lesson from wartime Britain was that local citizens and responders drawn from the population under attack were more efficient than any central planners in caring for their people, preventing panic and helping them get back on their feet.[17] The attacks on the World Trade Center and the Madrid commuter trains carry a similar lesson. For the most part, local citizens responded immediately and efficiently. Not only was there no panic, but in the case of the World Trade Center, the victims of the attack responded much better than any current response model would have predicted. They were "better than rational." University of Delaware sociologist Kathleen Tierney finds that locally aware actors are best able to respond to unexpected and varied local conditions.[18] One irony of 9/11 was that the principal facility of the New York Mayor's Office of Emergency Management, located at 7 World Trade Center, was completely destroyed in the attack. But volunteers who came primarily from local universities began staffing a geographic information systems (GIS) and mapping unit within New York City's emergency operations center, and a motley collection of local boats spontaneously began to efficiently coordinate supply and relief efforts well before official efforts were under way.

Although the 9/11 and 11-M commissions were not mandated to deal with root causes of terrorism, understanding those causes is surely relevant to homeland security. Knowing what motivates terrorists to act as they do can be a great help in figuring out how to stop them. Nevertheless, there is woefully little sign of any serious attempt to understand these causes, much less address them. This is evident in the routine references to "The War on Poverty" and "The War of Ideas" (or "The Battle for Hearts and Minds") as necessary parts of the "The War on Terror." These knee-jerk call to arms are lazy holdovers from the (admittedly successful) past struggles of liberal democracies to reduce blue-collar crime, where poverty and failures in education did prove to be reliable factors.[19] But with global terrorism, as with crimes of passion, these factors don't appear to be significant (neither is

psychopathology or sociopathy).[20]

Nearly every social science study of popular support for terrorism suggests that impoverishment and failure of education are not essential elements, despite proclamations by Nobel laureates, World Bank officials, UN ambassadors, U.S. and European leaders and the press. Studies suggest that most suicide bombers and Al-Qaeda operatives are more educated and economically better off than their home populations.[11,21] Few ever lived hand-to-mouth, or even attended religious madrassahs (except for Indonesian Jemaah Islamiyah). Pools of poverty can provide some "water" in which the "fish" can swim – or at least hide - but not unexceptionally so. Moreover, poll after poll indicates that the hearts and minds of the tens of millions of people who probably sympathize with Bin Laden and company are already open to ideas of participatory government, freedom of expression, economic choice and educational advancement.

Rather, what seems to matter most in inciting sympathy with militant Jihad, is the political failure to meet rising aspirations - dashed expectations often fueled by global communication of what other people around the world have and one might have hoped for.[10] Princeton University economist Alan Krueger finds terrorism worldwide to be correlated with denial of civil liberties (as defined by Freedom House, which works in coordination with the U.S. State Department), but not per capita income or amount of schooling.[22] University of Michigan political scientist Mark Tessler shows in surveys that in Middle Eastern countries the one reliable indicator of support for the 9/11 attacks is lack of confidence in one's own government (among North Africans this is highly correlated with distrust of the European Union), not age, gender, economic status, education, strength of religious conviction or attitude toward democracy.[23] Nor does Islam per se or "Muslim civilization" really have anything to do with terrorism – no more than some impossibly timeless or context-free notion of Christianity, Judaism, Hinduism or Buddhism can be held responsible for the millions of dead these religious traditions have been accused of. Arguments by outsiders that militant Islam can be undermined by showing it doesn't reflect the religion's "truth" or "essence" are likewise vacuous, for there is no "essence" or fixed content to any religion [24] (though debates among Muslims about – for example – whether killing children is acceptable, are critical to how their religion will be interpreted and applied). [25]

The historical precondition for turning popular support away from global Jihad, as well as for securing the popular legitimacy of any form of governance, is to instill in potential recruits from Arab and Muslim communities the confidence that they have some significant measure of control over their own fate – enough to help ensure the safety of people they care about and preserve the cultural identity that gives primary meaning to their existence. For our part, we need to show that we are prepared to accept "democracy's paradox" by supporting popularly elected outcomes we may not like, so long as they don't breed violence.

Soft-power efforts to convincingly offer alternative visions of a fair and just society may demand more patience than governments under attack, or being pressured to reform, typically are able to politically tolerate in times of crisis. But the necessary forbearance must be found to avoid increasingly catastrophic devastation to the democracies of Europe and the Americas, and to future hopes of Asian and African peoples who aspire to soft empowerment from a free and open world. Clearly, none of this necessitates negotiating with terrorist groups that sponsor murderous martyrs in pursuit of goals such as Al-Qaeda's quest to impose a global caliphate and do away with the Western-inspired system of nation-states represented at the UN. Those who choose to join the mission of Bin Laden's "World Islamic Front for Jihad against the Jews and Crusaders," and who seek no compromise, must be fought with hard power to the end.

The main challenge, though, may lie with uprooted and egalitarian Muslim young adults in European cities, who provided the manpower for both the 9/11 and 11-M attacks. There is no indication that any rival to Jihadism's uncompromising vision of a fair and just society – which debriefings show clearly motivate these people – is being conveyed to them. Secular education and liberal democracy do not by themselves speak sufficiently to the spiritual and cultural needs that their rootlessness generates. Immigrant integration into European societies has always been more difficult than in America, being more state-driven and “top down” than community-based and “bottom up.” In the USA, for example, if an immigrant group pays local property taxes, then the schools that run on those taxes tend to be more sensitive to cultural diversity. By contrast, Jules Ferry, the French prime minister who instituted modern secular education in Europe, once bragged that he knew what every public school teacher in every town in France would be teaching at a given time. Observes French political scientist Olivier Roy,[26] in Europe “multiculturalism” is taken not as valuing diversity but as a sign of withdrawal – an attempt to create alien entities between the individual and state. That's why almost the entire political spectrum of France opposed attempts by Muslim girls to wear headscarves in public schools.

The Madrid hearings indicate that the situation may be worse in some ways now than at the time of 9/11. There is no longer the controlling agency of the Al-Qaeda leadership to target, which seems to be operationally near dead: remnants of the – mostly Egyptian – hardcore around Bin Laden haven't managed an attack in over two years, don't know who many of the new terrorists are, and can't communicate secretly with those they do know. Instead, groups of buddies originating from the same area “back home” in North Africa or the Middle East, or from similar European housing projects and marginal neighborhoods, bond into action as they surf Jihadist websites on the internet to find direction from Al-Qaeda's inspiration.

Analyzing case studies of more than 400 Jihadists, University of Pennsylvania forensic psychiatrist Marc Sageman, a former intelligence officer who ran operations during the Afghan-Soviet War, finds that the social networks of these hard-to-penetrate militant groups are composed of about 20% kin and 70% friends (who tend to become kin over time through intermarriage).[27] They may read an internet text like “Iraqi Jihad” that suggests bombing Spanish trains to force that country's withdrawal from the US-led coalition in Iraq, and – presto – in 8 weeks an “amateur” plot is hatched and devastatingly executed (unlike the 5 years or so it took Al-Qaeda to plan and execute 9-11).[28] The fact that all of the plotters are caught or blow themselves up may have no effect on the ability of other groups to self-organize for single or multiple attacks. A new and vibrant Jihadist “market” is emerging, which is decentralized, self-organizing and self-correcting. How do we deal with that? Merely pounding away likely won't do the trick. Like pummeling mercury with a hammer, raw police force and military might only seem to generate more varied and insidious forms of the Jihadist hydra. Neither the 9/11 or 11-M commissions demonstrate much awareness of what now may be the central security problem of our time.

A key insight of R.V. Jones was that strategies to defeat an enemy must change with changes in scale. It may take distributed networks to fight local networks. Informal bonds may need to grow among diverse experts with idiosyncratic personal skills and the operational branches fighting terrorism, so that a phone call from an expert or operator in one country to another country can trigger specific responses without plodding through official channels. Classically hierarchical forms of military and intelligence “command and control” were suitable for large scale operations against the Taliban and Al-Qaeda's global organization, but are less so now (though classical means are still needed to prevent sanctuaries from re-emerging).

On offense, battling terrorist networks may further require what Rand analysts David Ronfeldt and John Arquilla call "netwar,"[29] including a revamped military that can franchise out operations to culturally astute and specialized mobile units that are able to tactically mimic and master increasingly elusive terrorist "swarms" – by homing in from scattered locations on multiple targets, then dispersing to form new swarms. But combating terrorism may also demand new strategic forms of "spider webbing" powered by multilateral, interfaith alliances of transnational, national and local groups. Bonded by mutual trust, purpose and dedication, these multi-channel associations could have the broad collective intelligence and resourcefulness to felicitously net and disrupt emerging swarms. Thus far terrorists seem better at networking - politically and operationally - than does the multi-nation enterprise arrayed against them.

On defense, Todd Laporte of the University of California at Berkeley finds in a review of U.S. nuclear facilities the best way to ward off unexpected catastrophe is to have decentralized networks with specialized teams of technically competent people whose culture rewards them for revealing their own errors [30] - a practice Al-Qaeda has used offensively to great effect. This tact contrasts markedly with recommendations for further directorial control of security services. Even now there is no institutional means for intelligence case officers who may know better to challenge information once it is passed on by "the 7th floor" (political directorship).

The 9/11 commission hearings in the USA and Comisión 11-M hearings in Spain intimate that our common political culture still lacks the audacious imagination and creative accountability to effectively communicate the real risks (even if largely unpredictable) and prepare the right responses (even if only partial) to face catastrophic threats.[31] Rather than confront matters squarely, acknowledging misjudgments in order to learn from mistakes, as good businessmen or scientists would do, many of our most influential politicians and pundits continue passing off responsibility or spinning justifications about how they've always been right and on the ball. Running forward, while looking backwards instead of ahead to the unknown, inevitably leads to a crash.

1. *National Commission on Terrorist Attacks upon the United States*, online release 22 September 2004; available at www.9-11commission.gov/report/index.htm.
2. *Comisiones de investigación sobre el 11 de marzo de 2004*, Congreso de los Diputados, Madrid, Session 13, 19 July 2004 and Session 30, 15 November 2004; available at www.losgenoveses.net/11M/CI_007.pdf and www.losgenoveses.net/11M/CI_017.pdf.
3. R. Garwin, Paper presented to 32nd Session, International Seminars on Planetary Emergencies, Erice, Sicily, 20 August 2004; available at www.fas.org/rlg/040820-sani.pdf.
4. R. Axelrod, *Risk in Networked Systems*, Prepared for the Office Asst. Sec. Defense for Networks and Info. Integration, 20 October 2003, available at www-personal.umich.edu/~axe/.
5. I. Ben-Israël, *Philosophie du renseignement, Logique et morale de l'espionnage* (Éditions de l'éclat, Paris, 2004).
6. A. Clauset, M. Young, *Physics and Society*, online release 3 February 2005; available at <http://arxiv.org/abs/physics/0502014>.
7. S. Begley, *Wall Street Journal*, 8 October 2004, p. B1.
8. To be sure, instrumental cost-benefit calculations often prevail within one's own moral and cultural framework. Most would-be martyrs and Jihadist religious leaders I have interviewed also say that if a roadside bomb can produce the same damage (i.e., without causing the deaths of any members of the group), then it is preferable. In short, when the focus is on the act itself, committed Jihadists may be even anti-consequentialist, but when

the focus is on the enemy, consequentialism emerges. For example, according to Al Qaeda's Ayman al-Zawahiri, instrumental concerns lead to: "the need to concentrate on the method of martyrdom operations as the most successful way of inflicting damage against the opponent and the least costly to the mujahidin in terms of casualties." [A. al-Zawahiri, *Knights Under the Prophet's Banner*, trans. Al-Sharq Al-Awsat, London, 2 December 2001, available at http://www.fas.org/irp/world/para/ayman_bk.html.]

9. For example, although Egyptian Islamic Jihad (Al-Jamaat al-Islamiyya, EIJ) and Egyptian Islamic Group (Al-Gama'a al-Islamiyyah, EIG) have common roots in Egyptian society, one crucial difference between them is that the EIJ leadership under Dr. Ayman Zawahiri left Egypt to join Bin Laden in Afghanistan whereas EIG remained behind in Egypt (Said). The hostile reaction of Said's population to the 1997 EIG massacre of some 60 tourists at the Temple of Queen Hatshepsut in Luxor, and to the subsequent government crackdown and economic downturn, effectively ended EIG's ability to mount military operations. By contrast, al-Zawahiri continues to urge Jihadists everywhere to inflict the greatest possible damage and cause the maximum casualties on the West, no matter how much time and effort these operations take, and regardless of the immediate consequences.

10. S. Atran, *Wash. Quart.*, 27, 67 (2004).

11. S. Atran, A. Merari, C. Wientjies, *Suicide Terrorism: The Strategic Threat and Countermeasures*. Joint Report to: NATO Sec. Sci. Prog., Res. Technol. Org., August 2004.

12. P. Hoodbhoy, *Foreign Affairs*, November/December 2004.

13. For a fictional portrayal – but realistic summary – of anarchist suicide bombers in 1905, see J. Conrad, *Secret Agent* (Penguin, London, 1983).

Beginning in the 1880s, a loosely-connected worldwide terrorist movement arose, egalitarian in principle and dedicated to the elimination of the power of the state and international capital. The world community of nations considered anarchism to pose the greatest threat to the internal political and economic order, and to international stability. Between 1894 and 1900, anarchist assassins had killed the President of France, the Empress of Austria and the King of Italy. In Russia, anarchists would assassinate numerous government ministers.

In September 1901, anarchist Leon Czolgosz assassinated President William McKinley. McKinley's assassination came after a wave of anarchist terrorism in Europe. The political (and to some extent social and economic) consequences were similar in many respects to those of the 9/11 attacks. [D. Rapoport, *Anthropoetics* 8 (Spring /Summer 2002).] In his first Annual Message to Congress, the new president Theodore Roosevelt declared anarchism to be the incarnation of "evil" and a "foe of liberty" acting against all mankind: "The cause of his criminality is to be found in his own evil passions and in the evil conduct of those who urge him on, not in any failure by others or by the state to do justice to him or his." [T. Roosevelt, *First Annual Message to Congress*, 3 December 1901, available at <http://www.geocities.com/presidentialspeeches/1901.htm>,] The President expanded this mission to eliminate terrorism and anarchy everywhere into an imperial mission to intervene in any country around the world if necessary to protect it from foreign evil and preserve it from chaos.: "Chronic wrongdoing, or an impotence which results in a general loosening of the ties of civilized society, may in America, as elsewhere, ultimately require intervention by some civilized nation, and may lead the United States, however reluctantly, in flagrant cases of such wrongdoing or impotence, to the exercise of an international police power." [T. Roosevelt, *The Roosevelt Corollary to the Monroe Doctrine*, May 1904, available at <http://www.theodore-roosevelt.com/trmdcorollary.html>.] Teddy Roosevelt made the defeat of anarchism an overriding mission of his administration: "When compared with the suppression of anarchy, every other question sinks into insignificance. The anarchist is the enemy of humanity, the enemy of all mankind; and his is a deeper degree of criminality than any other." [Submission to 60th U.S. Congress, Apr. 9, 1908, Doc. 426, by Ch.

Bonaparte, Attorney General, on behalf of Pres. Th. Roosevelt, available at <http://tmh.floonet.net/articles/bonaparte.html>.]

State reaction to anarchism played a formative role in creating national police and intelligence (FBI, Scotland Yard, Russian Okhrana). What seemed to make anarchism such a pressing threat was the radical transformation in political, economic, communication and transportation patterns of the age. Under popular pressures unleashed by the French Revolution – whose leader Maximilien Robespierre first introduced the idea of “terror” as ruthless tool for the preservation of freedom and liberty [M. Robespierre, *Principes de morale politique* Speech to French National Convention, 5 February 1794, available at <http://membres.lycos.fr/discours/1794.htm>] – absolute monarchies were softening into constitutional monarchies and even liberal trade democracies. Peoples and capital moved across international frontiers with an ease that in many respects in not even matched in today’s era of “globalization.” In 1912, two years before the start of WWI, just Imperial Russia and the Turkish Sultanate required passports. Only with the world trade agreements in the late 1990s were capital flows again able to recover this pre-WWI degree of freedom. The telegraph, daily mass newspapers, and railroads flourished in this period. [The first “real-time” diffusion of news across the world could be arguably dated to August 27, 1883, when the Indonesian volcano-island Krakatoa exploded and disappeared, S. Winchester, *Krakatoa* (HarperCollins, New York, 2003).] Also in 1912, the first transpacific radiotelegraph service linked San Francisco with Hawaii. The airplane, automobile and transcontinental communication by wireless radio were beginning to shrink time and space by quantum leaps over all previous advances in human history that make today’s information revolution and globalization trends pale by comparison.

Perhaps most worrisome, though, was the ability of anarchists to get their hands on weapons of mass destruction. The machine gun, invented during the American Civil War but first used with totally devastating effect in the Boer War, dynamite, invented by Alfred Nobel, and its derivatives including hand grenades and other forms of personal bombs, and chemical weapons, which anarchist groups as well as states were fervently working on.

Although the policies of the U.S. and European states to combat anarchism were often based on the assumption of fighting a well-organized international terrorist network, in fact there was little international or centralized terrorist planning (and in the case of the McKinley assassination, no organized plot at all). Rather, as with current Jihadist operations, anarchist attacks were usually carried out by peer groups (mostly friends and sometimes kin) who organized themselves in operational cells of a few people. As with modern Jihadism, anarchist ideology and operations often parasitized pre-existing local ethnic and national aspirations and organizations: for example, the Serbian “Black Hand,” which plotted the assassination of Austria’s Archduke Ferdinand, sparking WWI. Following WWI, Bolshevism effectively co-opted militant anarchism as a world political force – a process that culminated with Stalin undermining the anarchists the anarchist role on the Republican side during the Spanish Civil War. Then, with Communism’s demise, came Jihadism’s rise.

14. G. Vermeij, *Nature: An Economic History* (Princeton Univ. Press, Princeton, 2004).
15. S. Page, L. Huong, *J. Econ. Theory* 97,123 (2001).
16. R.V. Jones, *The Wizard War: British Scientific Intelligence, 1939-1945* (Coward, McCann & Geoghegan, New York, 1978).
17. E. Jones, R. Woolven, B. Durodie, S. Wessely, *Social History of Medicine*, **17**, 463 (2004).
18. K. Tierney, Paper presented to Special Session, Ann. Meet. Amer. Sociol. Assoc., Chicago, IL, 17 August 2002.
19. G. Becker, *Pol. Econ.* **76**, 169 (1968).
20. S. Atran, *Science* 299, 1534 (2003).

21. M. Sageman, *Understanding Terror Networks* (Univ. Pennsylvania Press, Philadelphia, 2004).
22. A. Krueger, J. Maleková, *Chron. Higher Educ.*, 6 June 2003; available at <http://chronicle.com/free/v49/i39/39b01001.htm>.
23. M. Tessler, Paper presented to NATO-AWR, "Suicide Terrorism: The Strategic Threat and Countermeasures," Lisbon, 12 June 2004.
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25. Jihadism is a thoroughly modern movement, despite atavistic cultural elements, filling a significant portion of the popular political void in Islamic societies left in the wake of locally discredited Western ideologies (anarchism, colonialism, fascism, nationalism, socialism, communism). To a considerable extent, it is also a counter-movement to the ideological thrust ensconced in the National Security Strategy of the United States, which sees liberal democracy as the "single sustainable model of national development... right and true for every person, in every society." [*Introduction to National Security Strategy of the United States*, White House, Washington, D.C., September 2003, available at <http://www.whitehouse.gov/nsc/nss.html>.] As with most historical counter-movements, this counter-movement incorporates some of the main social and spiritual missions of its adversary. Indeed, I would suggest that much more may be learned about Jihadism's apocalyptic yearnings and its "Born Again" vision of personal salvation through radical action from the New Testament's Book of Revelations than from the Quran. [For an extreme example of convergence, compare al-Zawahiri's *Knights Under the Prophet's Banner* and the works of White Supremacist ideologue William Pierce: for example, *The Turner Diaries* (National Alliance, Washington, DC, 1978), which ends with the hero ploughing his jet into the Pentagon on a successful suicide mission; also Pierce's analysis of the 9/11 attacks being carried out for the right reasons by the wrong people, *Free Speech* 7, November 2001, available at <http://www.natvan.com/free-speech/fs0111c.html>.]
26. O. Roy, *Globalized Islam* (Columbia Univ. Press, New York, 2004).
27. M. Sageman, Paper presented to the colloquium series, "Cultural Values and Terrorism," Univ. Michigan, Ann Arbor, 11 February 2005.
28. S. Atran, *New York Times*, 16 March 2004, p. A27.
29. D. Ronfeldt, J. Arquila, *Networks and Netwars* (Rand, Santa Monica, 2001).
30. T. Laporte, Paper presented to FBI Critical Incident Response Group on "The Suicide Terrorist Threat," Univ. Virginia, Charlottesville, 6 April 2004.
31. S. Simon, J. Stevenson, *The National Interest* **78**, 90 (2004). Simon and Stevenson argue that the academic-military cooperation of the 1950s and the early RAND "Think Tank" model were conducive for creative thinking about new strategic security threats. But now Academia is out to lunch (in particular Middle East and Cultural Studies, where Marxist anti-colonialism has mutated into post-modernist moral relativism) and the Think Tanks have become mainly political advocacy groups that lack the commitment and detachment needed. I'm not so ready to give up on Academia.